

# Testosterone therapy improves memory in postmenopausal women

6 June 2011

Post-menopausal women have better memory after daily treatment with a testosterone spray for six months, a new preliminary study finds. The results will be presented Saturday at The Endocrine Society's 93rd Annual Meeting in Boston.

"Women have a higher risk of developing dementia compared to men," said Sonia Davison, MD, PhD, the study's lead investigator and a postdoctoral research fellow at Monash University, Melbourne. "These results offer a potential therapy, where none currently exists, to slow [cognitive decline](#) in women."

The researchers compared a control group of 30 women who received no treatment with a group of nine healthy women in early menopause (ages 47 to 60) who knowingly received the testosterone spray on their skin. The spray dose returned [testosterone levels](#) in the blood to those typical of young women of childbearing age, according to Davison. All of the treated women were receiving a stable dose of non-oral [hormone replacement therapy](#).

All women underwent testing of cognitive function with a battery of computerized tests that can detect even small changes in [cognitive performance](#), Davison said. The researchers tested subjects' memory through their ability to recall items from a grocery list read aloud to them—a test of verbal learning and memory—and through their performance on tests of visual learning and memory. Cognitive testing occurred at the beginning and end (week 26) of the study.

At the start of the study the two groups did not differ significantly in their cognitive test results. After 26 weeks the untreated controls showed no significant differences between their initial and final test results, the authors found. The testosterone-treated group, however, improved their verbal learning and memory, as found on the shopping

list test, Davison reported.

"This is exciting in that the testosterone-treated women were all healthy, with no cognitive impairment, and there was a definite treatment effect of the testosterone spray," Davison said. "Testosterone may play a protective role against dementia."

She said their results need confirmation in a randomized, controlled clinical trial.

Provided by The Endocrine Society

APA citation: Testosterone therapy improves memory in postmenopausal women (2011, June 6) retrieved 27 November 2022 from <https://medicalxpress.com/news/2011-06-testosterone-therapy-memory-postmenopausal-women.html>

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